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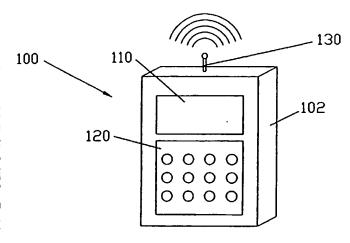
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(54) Title: MEDICAL APPARATUS REMOTE CONTROL AND METHOD



(57) Abstract: A system for providing medical treatment to a patient, including a medical treatment apparatus and a remote control device. The medical treatment apparatus has a local processor, and a local communication element connected to the local processor, while the remote control device includes a remote processor, user interface components connected to the remote processor, and a remote communication element connected to the remote processor and adapted to communicate with the local communication element of the medical treatment apparatus in a wireless manner such that information can be transferred between the local processor and the remote processor. The remote control device also includes at least two separate power supplies connected to the remote processor.

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#### INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61B5/00 A61N A61M5/172 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) A61B A61M IPC 7 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the International search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Category ' Citation of document, with indication, where appropriate, of the relevant passages X WO 00 10628 A (MINIMED INC) 1,3-15,36-47, 2 March 2000 (2000-03-02) 68 - 7316 - 34. page 8, line 13 -page 14, line 29 Α 48-62, 74-93 page 41, line 27 -page 42, line 31; tables Further documents are listed in the continuation of box C. Patent family members are listed in annex. X Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention 'A' document defining the general state of the art which is not considered to be of particular relevance earlier document but published on or after the international \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone filing date document which may throw doubts on priority claim(s) or which is clied to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-ments, such combination being obvious to a person skilled "O" document referring to an oral disclosure, use, exhibition or other means document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the International search Date of mailing of the international search report 30/09/2002 20 September 2002 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016 Weihs, J

### INTERNATIONAL SEARCH REPORT

Intermal Application No
PCT/US 01/50581

		PC1/US 01/50581		
	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	<del> </del>		
Category *	Citation of document, with indication, where appropriate, of the relevant passages		Relevant to claim No.	
X A	WO 00 19887 A (MINIMED INC) 13 April 2000 (2000-04-13)  page 5, line 18 -page 26, line 20; tables 1-14		1,3,4,6, 10-15, 24,26, 28,29, 36-38, 42-47, 56,58, 60-62, 67-73, 76,77,82 2,5, 16-22, 25,34, 35, 48-54,	
			46-54, 66,74, 79,80, 92,93	
Α	WO 00 29047 A (KIM YOON OK ;CHO OK KYUNG (DE); PHISCIENCE GMBH ENTWICKLUNG VO (DE) 25 May 2000 (2000-05-25) page 4, line 15 -page 11, line 21		1-93	
A	US 5 507 288 A (BLASBERG PETER ET AL) 16 April 1996 (1996-04-16)		1-15, 36-48, 68-74	
	column 5, line 16 -column 8, line 60; tables 1,2			
E	WO 02 20073 A (INSULET CORP) 14 March 2002 (2002-03-14) page 8, line 1 -page 28, line 21; tables 1-13	·	1-93	
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		-		
	-			

### INTERNATIONAL SEARCH REPORT

information on patent family members

Intermal Application No
PCT/US 01/50581

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Patent document cited in search report		Publication date		Patent family member(s)	Publication date
WO 0010628	A	02-03-2000	AU	5681599 A	14-03-2000
WO 0010020	•	02 00 2000	EP	1109586 A	
			JP	2002523149 T	30-07-2002
			ÜS	2002107476 A	
			MO	0010628 A	
			US	2002002326 A	
WO 0019887	Α	13-04-2000	 AU	6255699 A	26-04-2000
			EΡ	1119285 A	01-08-2001
			WO	0019887 A	13-04-2000
			US	2002002326 A	1 03-01-2002
WO 0029047	Α	25-05-2000	DE	19853035 A	
			DE"	19920896 A	
			WO	9932174 A	
			MO	0029047 A	
		· .	EP	1131118 A	12-09-200
US 5507288	Α	16-04-1996	DE	4415896 Ā	
			ΑU	674474 B	
			ΑU	1763495 A	07-12-1999
			CA	2148569 A	
			CN	1128353 A	07-08-1996
			EP	0680727 A	
			FI	952131 A	06-11-199
			HU	75243 A	
			IL	113569 A	04-01-1998
			JP	7311196 A	28-11-1995
			- KR	163476 B	
			NO	951754 A	06-11-1995
			NZ	272000 A	24-04-1997
			ZA 	9503585 A	04-11-1996
WO-0220073	Α	14-03-2002	AU	8857501 A	22-03-2002
			WO	0220073 A	
			US	2002072733 A	1 13-06-200